IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please AMEND claims 1, 9, 12, 14-18, 21, and 32 in accordance with the following:

1. (CURRENTLY AMENDED) A video stream processing method in a broadcast receiving system for time-delayed viewing, which includes disks having control information required for recording an input signal and reproducing recorded information recorded and a drive for driving the disks, the video stream processing method comprising:

using a processor to assign physically discontinuous free blocks in a disk recording area to sequential logical blocks in a circular buffer, based on the control information when a time-delayed viewing mode is selected; and

recording video streams for time-delayed viewing in the assigned circular buffer blocks, wherein physical blocks are indicated to be free blocks in the control information.

2. (ORIGINAL) The video stream processing method of claim 1, further comprising updating the control information and setting a pointer of a write point to a last one of the assigned circular buffer blocks after the recording of the video streams.

3. (ORIGINAL) The video stream processing method of claim 1, wherein the sequentially assigning of the free blocks comprises assigning the free blocks as the circular buffer blocks in a track and sector number ascending order.

4. (ORIGINAL) The video stream processing method of claim 1, wherein the control information comprises file attribute information, file assignment information, free block information for each track, and circular buffer block information.

5. (ORIGINAL) The video stream processing method of claim 1, further comprising:

recovering the circular buffer blocks to the free blocks when the broadcast receiving system is initialized.

6. (ORIGINAL) The video stream processing method of claim 1, further comprising recovering the assigned circular buffer blocks to the free blocks and updating the control information when a next circular buffer block is assigned.

7. (ORIGINAL) The video stream processing method of claim 1, wherein the sequentially assigning free blocks comprises interleavedly assigning the free blocks for each video stream, if the video streams are of different channels to be recorded concurrently.

8. (ORIGINAL) The video stream processing method of claim 5, wherein the recovering of the circular blocks comprises updating information of one of the circular buffer blocks which is pointed by a pointer at a write point with free block information, the video stream processing method further comprising initializing the pointer.

9. (CURRENTLY AMENDED) A video stream processing method in a broadcast receiving system for time-delayed viewing, which includes a hard disk drive having control information required for recording an input signal and reproducing recorded information recorded in a predetermined area, the video stream processing method comprising:

using a processor to assign physically discontinuous free blocks in a disk recording area to sequential logical blocks in a circular buffer and recording video streams for time-delayed viewing in the assigned circular buffer blocks, based on the control information when a time-delayed viewing mode is selected; and

assigning free blocks of the disk recording area and recording video streams of a channel to be recorded in the assigned physically discontinuous free blocks when a recording mode is selected during the time-delayed viewing mode, assigning free blocks nearest to the recorded free blocks as the circular buffer blocks, and recording the video streams for time-delayed viewing in the assigned circular buffer blocks,

<u>wherein physical blocks are indicated to be free blocks in the control information</u>.

10. (ORIGINAL) The video stream processing method of claim 7, further comprising updating the control information and setting a pointer of a write point to a last one of the assigned circular buffer block each time the video streams are recorded in the free blocks subsequent to the recording of the video streams for time-delayed viewing in the assigned circular buffer blocks.

11. (ORIGINAL) The video stream processing method of claim 9, wherein the free blocks nearest to the recorded free blocks are in a same track or a nearest track of the recorded free blocks.

12. (CURRENTLY AMENDED) A video stream processing method in a broadcast receiving system for time-delayed viewing, which includes a hard disk drive having control information required for recording an input signal and reproducing recorded information recorded in a predetermined area, the video stream processing method comprising:

using a processor to assign physically discontinuous free blocks in a disk recording area to sequential logical blocks in a circular buffer and recording video streams for time-delayed viewing in the assigned circular buffer blocks, based on the control information when a time-delayed viewing mode is selected;

assigning free blocks of the disk recording area, recording video streams of a channel to be recorded in the assigned physically discontinuous free blocks, assigning free blocks nearest to the recorded free blocks as the circular buffer blocks, and recording video streams for time-delayed viewing in the assigned circular buffer blocks, when a recording mode is selected together with the time-delayed viewing mode; and

reading free blocks to be reproduced based on the control information, assigning free blocks nearest to the reproduced free blocks as the circular buffer blocks, and recording the video streams for time-delayed viewing in the assigned circular buffer blocks, when a reproduction mode is selected together with the time-delayed viewing mode,

wherein physical blocks are indicated to be free blocks in the control information.

13. (ORIGINAL) The video stream processing method of claim 12, wherein the free blocks nearest to the recorded free blocks are in a same track or a nearest track of the recorded free blocks.

14. (CURRENTLY AMENDED) A video stream processing method in a broadcast receiving system for time-delayed viewing, which includes a hard disk drive having control information required for recording an input signal and reproducing recorded information in a predetermined area, the video stream processing method comprising:

using a processor to assign physically discontinuous free blocks in a disk recording area to sequential logical blocks in a circular buffer and recording video streams for time-delayed

viewing in the assigned circular buffer blocks, based on the control information when a time-delayed viewing mode is selected; and

reading blocks to be reproduced based on the control information, assigning free blocks nearest to the reproduced free blocks as the circular buffer blocks, and recording the video streams for time-delayed viewing in the assigned circular buffer blocks, when a reproduction mode is selected together with the time-delayed viewing mode,

wherein physical blocks are indicated to be free blocks in the control information.

15. (CURRENTLY AMENDED) A video stream processing method in a broadcast receiving system for time-delayed viewing, which includes a hard disk drive having control information required for recording an input signal and reproducing recorded information in a predetermined area, the video stream processing method comprising:

using a processor to assign free blocks of a recording disk area;

recording video streams of a channel to be recorded in the assigned free blocks;

assigning free blocks nearest to the recorded free blocks as logical blocks in a circular buffer; and

recording the video streams for time-delayed viewing in the assigned circular buffer blocks,

wherein physical blocks are indicated to be free blocks in the control information.

16. (CURRENTLY AMENDED) A video stream processing method in a broadcast receiving system for time-delayed viewing, which includes a hard disk drive having control information required for recording an input signal and reproducing recorded information in a predetermined area, the video stream processing method comprising:

reading blocks to be reproduced based on the control information;

using a processor to assign free blocks nearest to the reproduced free blocks as logical blocks in a circular buffer; and

recording video streams for time-delayed viewing in the assigned circular buffer blocks,

wherein physical blocks are indicated to be free blocks in the control information.

17. (CURRENTLY AMENDED) A video stream processing method in a broadcast receiving system, the video stream processing method comprising:

recording a video stream in free blocks of a disk recording area or reading a recorded video stream recorded in the disk recording area; and

using a processor to assign free blocks nearest to the recorded or reproduced free blocks as logical blocks in a circular buffer,

wherein physical blocks are indicated to be free blocks in control information.

18. (CURRENTLY AMENDED) A recording medium in a broadcast receiving system having a hard disk drive, the recording medium comprising:

a video stream storing area which records video streams, comprising:

video stream blocks which are physically discontinuously arranged and assigned sequentially within a circular buffer, and which are used to record video streams for time-delayed viewing; and

free blocks which are logically assignable to the circular buffer, or which record other video streams during a mode other than a time-delayed viewing mode; and

a control information area which stores control information relating to the video stream storing area,

wherein the video stream blocks are arranged physically discontinuously based on the control information stored in the control information area,

wherein physical blocks are indicated to be free blocks in the control information.

19. (CANCELED)

20. (ORIGINAL) The recording medium of claim 18, wherein the control information area comprises:

file attribute information;

file assignment information;

free block information which manage the free blocks for each track of the recording medium; and

circular block information which manage the circular buffer blocks.

21. (CURRENTLY AMENDED) A broadcast receiving system, comprising:

a hard disk drive having a hard disk as a recording medium, the recording medium having control information for recording an input signal and reproducing recorded information; and

a controller which assigns physically discontinuous free blocks in a disk recording area to sequential logical blocks in a circular buffer, based upon the control information in response to a

time-delayed viewing mode being selected, and which records video streams for time-delayed viewing in the assigned circular buffer blocks,

wherein physical blocks are indicated to be free blocks in the control information.

22. (ORIGINAL) The broadcast receiving system of claim 21, further comprising:

a broadcast signal receiver comprising:

a first radio frequency tuner which receives an external broadcast signal,

a second radio frequency tuner which receives an external analog broadcast signal,

a video compressor which converts the received analog signal to a digital signal and compresses the digital signal, and

a selector which selectively enables transmission of the external digital broadcast signal and the compressed digital signal;

a random access memory which temporarily stores the selectively transmitted external digital broadcast signal and the compressed digital signal from the selector prior to recording on and subsequent to reading from the recording medium; and

a video recovery unit which restores the video streams read from the recording medium and temporarily stored in the random access memory to original signals.

23. (ORIGINAL) The broadcast receiving system of claim 21, further comprising:

an input device which enables simultaneous operation of the time-delayed viewing mode and a recording mode;

wherein the controller assigns free blocks of the recording medium, records the video streams of a channel to be recorded in the assigned free blocks in response to the selection of the simultaneous operation of the time-delayed and recording modes, assigns free blocks nearest to the recorded free blocks as circular buffer blocks, and records the video streams for time-delayed viewing in the assigned circular buffer blocks.

24. (ORIGINAL) The broadcast receiving system of claim 21, further comprising:

an input device which enables simultaneous selection of the time-delayed viewing mode and a reproduction mode;

wherein the controller reads blocks to be reproduced based on the control information, assigns free blocks nearest to the reproduced free blocks as the circular buffer blocks, and records the video streams for time-delayed viewing in the assigned circular buffer blocks, in response to the selection of the simultaneous operation of the time-delayed and reproduction

modes.

25. (ORIGINAL) The broadcast receiving system of claim 21, wherein the controller updates the control information and sets a pointer of a write point to a last one of the assigned circular buffer blocks after recording the video streams.

26. (ORIGINAL) The broadcast receiving system of claim 21, wherein the hard disk drive comprises:

a control unit which controls the hard disk drive;

and an expander which expands the hard disk drive.

27. (ORIGINAL) The broadcast receiving system of claim 22, wherein the controller comprises:

a read-only memory which stores control program data to control the random access memory and the hard disk drive; and

a second random access memory which temporarily stores data during a control operation of the controller.

28. (ORIGINAL) The broadcast receiving system of claim 21, further comprising:

a random access memory which temporarily stores the video streams prior to recording on and subsequent to reading from the recording medium, wherein the random access memory comprises:

a control information copy area in which the control information is copied during system initialization of the broadcast receiving system,

a circular buffer pointer area having a pointer array which points to the circular buffer blocks, and

a video stream buffer area which buffers blocks of the video streams; and

a video recovery unit which restores the video streams read from the recording medium and temporarily stored in the random access memory to original signals.

29. (ORIGINAL) The broadcast receiving system of claim 28, wherein the circular buffer blocks form a circular buffer and write and read pointers of the circular buffer have specific pointer values in the random access memory so that the circular buffer blocks of the circular

buffer are discontinuous.

30. (ORIGINAL) The broadcast receiving system of claim 21, wherein the controller sets a pointer of a write pointer to a last one of the assigned circular buffer blocks and changes the assigned circular buffer blocks to free blocks subsequent to recording the video streams for time-delayed viewing in the assigned circular buffer blocks.

31. (ORIGINAL) The broadcast receiving system of claim 28, wherein the controller sets a pointer of a write pointer to a last one of the assigned circular buffer blocks, changes the assigned circular buffer blocks to free blocks, and updates the control information in the control information copy area of the random access memory, subsequent to recording the video streams for time-delayed viewing in the assigned circular buffer blocks.

32. (CURRENTLY AMENDED) A broadcast receiving system, comprising:

a hard disk drive having a hard disk as a recording medium, the recording medium having control information for recording an input signal and reproducing recorded information;

a controller which records a video stream in physical free blocks of the recording medium or reads a recorded video stream recorded on the recording medium and assigns physical free blocks nearest to the recorded or reproduced physical free blocks as logical circular buffer blocks based on the control information,

wherein physical blocks are indicated to be free blocks in the control information.